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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,959	11/19/2003	Bogdanovich Alexander	7100-038	6455

4678 7590 07/23/2007

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EXAMINER	
BEFUMO, JENNA LEIGH	
ART UNIT	**PAPER NUMBER**
1771	

MAIL DATE	DELIVERY MODE
07/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/716,959	ALEXANDER ET AL.	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) *8-10,13-24,26-29 and 31-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,11,12,25 and 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Amendment submitted on May 8, 2007, has been entered. Claims 1 and 7 have been amended. Therefore, the pending claims are 1 – 40. Claims 8 – 10, 13 – 24, 26 – 29, and 31 – 40 are withdrawn from consideration for being drawn to a nonelected invention.

2. The amendment to claim 7 is sufficient to overcome the 35 USC 112 1st paragraph rejection set forth in the previous Office action.

3. The 35 USC 102 and 35 USC 102/103 rejections based on Jayaraman et al. (6,381,482) is withdrawn since Jayaraman et al. fails to teach that the intersecting yarn components run in at least three axes.

4. The 35 USC 102 and 35 USC 102/103 rejections based on Wheeler et al. (5,029,977) is withdrawn since Wheeler et al. fails to teach that the intersecting yarn components run in at least three axes. However, a new reason for rejection is set forth below.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 – 7, 11, and 25 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Hill et al. (US 2003/0211797).

Hill et al. discloses a woven article comprising plural layers with electrically insulating and electrically conductive yarns woven together and circuit carrier disposed within the fabric layers (abstract). As shown in Figure 1B, the yarns run in the x-direction, y-direction and z-direction, creating a fabric wherein the yarns systems run in at least three axes. Further, the circuit carrier disposed within the fabric layers is integrated into the fabric. Also, the circuit carrier can a functional yarn which is directly incorporated into the fabric (paragraph 27). The circuit carriers can be an electronic device comprising a light emitting diode (LED) the emits light in response to an electrical signal (paragraph 33). Further, the LED or any other electronic device can be programmed to provide a display or a sensor array (paragraph 37). Also, the electronic device may be a sensor (paragraph 42, 45, and 46).

With regards to the limitation of when the system, device, or network is incorporated into the fabric structure, these limitations are considered method limitations in a product-by-process claim. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or an obvious variant from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the Applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). In the present case, the final product regardless of when the network, system, or device is added, would be a composite woven fabric with a system, network, or device integrated into the structure of the fabric. Hill et al. teaches that the circuit carrier (i.e., the network, device, or system) is integrated into the structure of the fabric in the final product. Thus, Hill et al. teaches the claimed final product. Therefore, claims 1 – 7 and 11 are anticipated.

With regard to claim 25, the claim recites limitations with regards to how the fabric is used. It has been held that a recitation with respect to the manner in which a claimed product is intended to be employed does not differentiate the claimed product from a prior art product satisfying the claimed structural limitation.

Ex parte Masham, 2 USPQ2d 1647 (1987). Therefore, how the fabric is used is not given patentable weight. Claim 25 is rejected along with claim 1.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 12 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. in view of Jayaraman et al.

The features of Hill et al. have been set forth above. While Hill discloses that various circuit carrier materials can be used in the woven fabric system and that the circuit carriers can be sensors, Hill et al. fails to teach using optical fibers. Jayaraman et al. is drawn to fabrics comprising integrated circuit. Jayaraman et al. teaches that sensors can include optical fibers provide detection and alert (column 6, lines 45 – 58). Thus, it would be obvious to use optical fibers with the sensor components, as taught by Jayaraman et al., in the fabric of Hill et al. since the materials are suitable for providing generation detection and alert. Further, It would have been obvious to one having ordinary skill in the art to use known optical fibers, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Thus, claims 12 and 30 are rejected.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of

this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jlb
July 18, 2007

JENNA BEFUMO
PRIMARY EXAMINER